What is claimed is:

An optical switch comprising a cladding layer and a core disposed in an interior of the cladding layer for light propagating in such a way that a width of the core is enlarged at a branching section formed at a portion along length of the core to provide plural branched cores to enable to alter a propagation path of inputted light by selective heating of portions of the branching section and the plural branched cores, wherein a branching section heater for heating the branching section and branched core heaters for heating the plural branched cores are controlled separately.

- An optical switch according to claim, wherein a set of heaters comprised by a 2. branching section heater and a branched core heater is provided for each core of the plural branched cores so as to selectively block propagation of light through the plural branched cores.
- An optical switch according to claim 2, wherein said set of heaters comprised by 3. a branching section heater and a branched core heater are controlled separately.
- An optical switch according to claim 2, wherein said set of heaters comprised by 4. a branching section heater and a branched core heater are made as a unitized heater.
- An optical switch according to clarm 1, wherein a minimum distance separating a branching core heater for heating one branches core of the plural branched cores and a center of a core adjacent to said one branched core is 40 µm or more.
- An optical switch according to claim 1, wherein said core is a Y-shaped core 6. having two branched cores.
- 7. An optical switch according to claim 1, wherein at least one of either the core or the cladding layer is comprised by a polymeric material.



- 8. An optical switch according to claim 1, wherein said branching section heater and said branched core heater are comprised by an electrically conductive thin film provided above the cladding layer.
- 9. An optical switch comprised substantially by combining in plural optical switches according to claim 1.